



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,239	02/12/2004	James M. LeClair JR.	01-CLP-444 CIP#1	4498

200 7590 08/24/2005

EATON CORPORATION
 EATON CENTER
 1111 SUPERIOR AVENUE
 CLEVELAND, OH 44114

EXAMINER

MITCHELL, KATHERINE W

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,239

Applicant(s)

LECLAIR ET AL.

Examiner

Katherine W. Mitchell

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. However, as a courtesy, the patent has been listed by examiner on the attached 892, so no action or fee is required.

Claim Objections

2. Claim 1 is objected to because of the following informalities: Claim 1, (b) appears to be claiming at least one from a group of alternatives. The wording is unclear and a Markush Group wording is suggested. A Markush Group and its application are discussed in the MPEP Paragraph 2173.05(h).

Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See Ex parte Markush, 1925 C.D. 126 (Comm'r Pat. 1925).

Ex parte Markush sanctions claiming a genus expressed as a group consisting of certain specified materials. Inventions in metallurgy, refractories, ceramics, pharmacy, pharmacology and biology are most frequently claimed under the Markush formula but purely mechanical features or process steps may also be claimed by using the Markush style of claiming. See Ex parte Head, 214 USPQ 551 (Bd. App. 1981); In re Gaubert, 524 F.2d 1222, 187 USPQ 664 (CCPA 1975); and In re Harnisch, 631 F.2d 716, 206 USPQ 300 (CCPA 1980). It is improper to use the term "comprising" instead of "consisting of." Ex parte Dotter, 12 USPQ 382 (Bd. App. 1931).

Art Unit: 3677

The use of Markush claims of diminishing scope should not, in itself, be considered a sufficient basis for objection to or rejection of claims. However, if such a practice renders the claims indefinite or if it results in undue multiplicity, an appropriate rejection should be made.

Similarly, the double inclusion of an element by members of a Markush group is not, in itself, sufficient basis for objection to or rejection of claims. Rather, the facts in each case must be evaluated to determine whether or not the multiple inclusion of one or more elements in a claim renders that claim indefinite. The mere fact that a compound may be embraced by more than one member of a Markush group recited in the claim does not necessarily render the scope of the claim unclear. For example, the Markush group, "selected from the group consisting of amino, halogen, nitro, chloro and alkyl" should be acceptable even though "halogen" is generic to "chloro."

The materials set forth in the Markush group ordinarily must belong to a recognized physical or chemical class or to an art-recognized class. However, when the Markush group occurs in a claim reciting a process or a combination (not a single compound), it is sufficient if the members of the group are disclosed in the specification to possess at least one property in common which is mainly responsible for their function in the claimed relationship, and it is clear from their very nature or from the prior art that all of them possess this property. While in the past the test for Markush-type claims was applied as liberally as possible, present practice which holds that claims reciting Markush groups are not generic claims (MPEP § 803) may subject the groups to a more stringent test for propriety of the recited members. Where a Markush expression is applied only to a portion of a chemical compound, the propriety of the grouping is determined by a consideration of the compound as a whole, and does not depend on there being a community of properties in the members of the Markush expression.

When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, then "wherein R is A, B, C or D" shall also be considered proper.

Appropriate correction is required.

Drawings

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

Art Unit: 3677

any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Niemiec, USP 5199718. Examiner notes that the portion of claim 1 prior to “characterized by said seal assembly comprising” is applicant’s admitted prior art per applicant’s “Background of the Invention” and Fig 1.

Niemiec teaches a rotary fluid pressure device (Fig 2) having a seal assembly comprising, in the order of direction of leakage flow from the pressurized case drain region:

- A high pressure shaft seal (54)
- An annular chamber in which is disposed a rigid backup member (58) adjacent the high pressure (HP) shaft seal (54), said backup member cooperating with one of the housing means (12), high pressure shaft seal (54) and input-output shaft (14) to define a fluid passage means (48)
- A drain passage disposed between said annular chamber and a case drain port, whereby fluid leaking from said case drain region past said HP

Art Unit: 3677

shaft seal flows through said fluid passage means, then through the drain passage (46) to said case drain port (68- external to housing)

- And a low pressure (LP) shaft seal (52).

Re claims 7-8: the backup member can be considered to cooperate with the input output shaft (14) to define axially extending fluid passage means per Fig 2. The passage is 3-dimensional and thus the fluid passage means can be considered to be both axially and radially extending. Note that applicant did not claim "directly cooperate", and two things can be considered to cooperate with each other by way of their common cooperation to something else.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zumbush USP 4491332 in view of Niemiec USP 5199718. Examiner notes that the portion of claim 1 prior to "characterized by said seal assembly comprising" is applicant's admitted prior art per applicant's "Background of the Invention" and Fig 1.

Zumbush teaches a rotary fluid pressure device (Fig 2) characterized by said seal assembly comprising a HP shaft seal (Fig 4), an annular chamber in which is disposed a rigid backup member (85) and a LP seal (53). The fluid pressure operated displacement means may comprise an internally toothed ring member (23) and an

Art Unit: 3677

externally toothed star member (27) which comprises the movable member (Fig 1).

Star member (27) may be disposed eccentrically within said ring member (23) for relative orbital and rotational movement. Valve member may comprise a hollow generally cylindrical spool valve member (41). The fluid pressure in the inlet port (near rearward end) surrounds the spool valve member over a limited axial extent thereof.

However, Zumbusch fails to disclose a backup member cooperating with one of the housing means, high pressure shaft seal, and input-output shaft to define a fluid passage means. Niemiec teaches such an arrangement in col 3 lines 47-51, as also shown in Fig 2 -- an annular chamber in which is disposed a rigid backup member (58) adjacent the high pressure (HP) shaft seal (54), said backup member cooperating with one of the housing means (12), high pressure shaft seal (54) and input-output shaft (14) to define a fluid passage means (48). The backup member can be considered to cooperate with the input output shaft (14) to define axially extending fluid passage means per Fig 2. The passage is 3-dimensional and thus the fluid passage means can be considered to be both axially and radially extending. Note that applicant did not claim "directly cooperate", and two things can be considered to cooperate with each other by way of their common cooperation to something else.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zumbusch as taught by Niemiec to include a backup member cooperating with one of the housing means, high pressure shaft seal, and input-output shaft to define a fluid passage means in order to allow fluid to flow

Art Unit: 3677

externally of the housing, to ensure that the fluid does not build up pressure and/or overheat in the seal.

Additionally regarding claim 4: In an apparatus claim, if the structure claimed is present, it is assumed that the method of use limitations are met.

Allowable Subject Matter

8. Claims 2-3 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

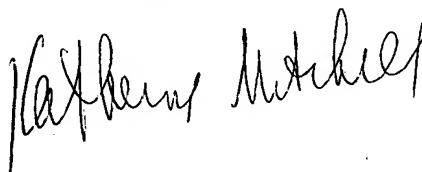
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3677

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell
Examiner
Art Unit 3677

A handwritten signature in black ink, appearing to read "Katherine Mitchell", written in a cursive style.

Kwm
8/18/2005